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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,185	02/12/2004	Kazutoshi Sakurai	Q79292	3077

23373 7590 10/06/2006

SUGHRUE MION, PLLC  
2100 PENNSYLVANIA AVENUE, N.W.  
SUITE 800  
WASHINGTON, DC 20037

EXAMINER

SRIVASTAVA, KAILASH C

ART UNIT PAPER NUMBER

1657

DATE MAILED: 10/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/776,185	<b>Applicant(s)</b> SAKURAI ET AL.	
	<b>Examiner</b> Dr. Kailash C. Srivastava	<b>Art Unit</b> 1655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>02.12.2004</u> . | 6) <input type="checkbox"/> Other: _____  |

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### **DETAILED ACTION**

1. Applicants' Preliminary Amendment filed 12 February 2004 is acknowledged and entered.
2. To clarify the record, the correct number for your application under prosecution at the United States Patent and Trademark Office (i.e., USPTO) is 10/776,185; not "divisional of Appln. No. 10/041,455" as stated on the header to the "Preliminary Amendment" cited above. To aid in correlating any papers for this application, please ensure that all further correspondence regarding this application is clearly marked with this application number (i.e., 10/776,185).
3. Your application under prosecution at the USPTO has been assigned to Art Unit 1655. To aid in correlating any papers for this application (i.e., 10/776,185) all further correspondence regarding this application should be directed to Art Unit 1655.
4. The assigned Examiner to your application (i.e., 10/776,185) in the USPTO is Dr. Kailash C. Srivastava. To aid in correlating any papers for this application (i.e., USSN 10/776,185), all further correspondence regarding this application should be directed to Examiner Kailash C. Srivastava in Art Unit 1655.

### **CLAIMS STATUS**

5. Claims 1-4 have been cancelled.
6. Claim 5 is the only pending Claim.

### **Objection To Specification**

7. The specification is objected to because Line one of first page of specification, in its present form does not properly cite the application priority data. It is requested that the first line of the first page of the specification indicate that the instant application Claims priority to USSN 10/041, 455, as follows:

“This application Claims Priority to United States Non-Provisional Application Serial Number 10/041,555 filed 10 January 2002, now U.S. Patent 6,723,501.

8. The specification is replete with terms, which are not clear, concise and exact. The specification should be revised carefully to correct verbose terms. Example of some unclear, inexact or verbose terms used in the specification is: e.g., Page 4, line 21-22, “resides in that since the secretion of saliva” or. The examiner suggests that the applicant should carefully revise the specification including the abstract to make the specification clearly comprehensible. Applicants' cooperation is requested in correcting any errors of which applicants may become aware in the specification. Applicants are warned to be careful to not add any new matter while revising the application for corrections to eliminate inexact or verbose terms.

### ***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

*A person shall be entitled to a patent unless –*

*(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.*

10. Claim 5 is rejected under 35 U.S.C. § 102(b) as anticipated by Kostelc et al (Journal of Periodontal Research, 1980, Volume 15, Pages 185-192).

Claim 5 recites propertied of an artificial mouth odor comprising components present in the headspace of anaerobically cultured saliva, wherein saliva was collected immediately after wake-up.

Kostelc et al. teach determining the volatile components of headspace samples collected from a container containing saliva obtained at 10 minute interval before the subjects had taken anything by mouth or engaged in any oral hygiene procedures (Page 186, Column 1, Lines 31-35). The saliva samples were incubated in a 25 mL capacity 2 neck round bottom flask that was sealed under an atmosphere of nitrogen, after depositing the saliva sample in said flask (Page 187, Column 1, Lines 1-25). The headspace samples from said flasks were analyzed by gas chromatography. Saliva headspace analysis data shows presence of higher alcohols, sulfur

containing gases (e.g., dimethyl di- and tri-sulfides), pyridines and aromatic alcohols among other organic compounds in sample collected from individuals having periodontal diseases and those without periodontal disease. Concentrations of higher aliphatic alcohols (e.g., dodecanol), aromatic alcohols (e.g., p-cresol) and pyridines were, however, higher in individuals having periodontal disease (Table 2). Note that a reference teaches presence of similar compounds obtained according to same methods and under same conditions as instantly claimed.

Therefore, the reference is deemed to anticipate the cited claim.

11. Claim 5 is rejected under 35 U.S.C. § 102(b) as anticipated by Labows et al. (U. S. Patent 4,349,626).

Claim 5 recites properties of an artificial mouth odor comprising components present in the headspace of anaerobically cultured saliva, wherein saliva was collected immediately after wake-up.

Labos et al. teach determining the volatile components of headspace samples collected from a container containing saliva obtained at 10 minute interval before the subjects had taken anything by mouth or engaged in any oral hygiene procedures (Column 5, Lines 20-40). The saliva samples were incubated in a 25 mL capacity 2 neck round bottom flask that was sealed under an atmosphere of nitrogen, after depositing the saliva sample in said flask (Column 6, Lines 2-20). The headspace samples from said flasks were analyzed by gas chromatography (Column 6, Line 66 to Column 7, Line 5). Saliva headspace analysis data shows presence of higher alcohols, sulfur containing gases (e.g., dimethyl di- and tri-sulfides), pyridines and aromatic alcohols among other organic compounds in sample collected from individuals having periodontal diseases and those without periodontal disease. Concentrations of higher aliphatic alcohols (e.g., dodecanol), aromatic alcohols (e.g., p-cresol) and pyridines were, however, higher in individuals having periodontal disease (Table 2). Note that a reference teaches presence of similar compounds obtained according to same methods and under same conditions as instantly claimed.

Therefore, the reference is deemed to anticipate the cited claim.

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### Other Prior Art

12. The prior art made of record and not relied upon is considered pertinent to Applicants' disclosure.

- Richter, V. J. et al. Archives of Oral Biology. 1964, Volume 9, Pages 47-53;
- Tonzetich, J. Archives of Oral Biology. 1971, Volume 16, Pages 587-597; and
- Tonzetich, J. Archives of Oral Biology. 1978, Volume 23, Pages 875-880.

### *Claim Rejections - 35 U.S.C. § 112*

13. The following is a quotation of the second paragraph of 35 U.S.C. § 112:

*The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.*

14. Claim 5 is rejected under 35 U.S.C. §112 second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention.

- Claim 5 is rendered, unclear, vague and therefore indefinite because of the phrase, "characterized by". This phrase is ambiguous and, therefore, any limitations recited thereafter are unclear. Appropriate correction is required.
- Phrase "immediately after wake-up" in Claim 5 renders that claim unclear, vague and therefore indefinite, because the metes and bounds for the phrase "immediately after wake-up" are not defined. Appropriate correction is required

### Conclusion


15. For reasons aforementioned, no Claims are allowed.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Kailash C. Srivastava whose telephone number is (571) 272-0923. The examiner can normally be reached on Monday to Thursday from 7:30 A.M. to 6:00 P.M. (Eastern Standard or Daylight Savings Time).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Terry McKelvey, can be reached on (571)-272-0775 Monday through Friday

8:30 A.M. to 5:00 P.M. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding may be obtained from the Patent Application Information Retrieval (i.e., PAIR) system. Status information for the published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (i.e., EBC) at: (866)-217-9197 (toll-free). Alternatively, status inquiries should be directed to the receptionist whose telephone number is (703) 308-0196.

  
Kailash C. Srivastava, Ph.D.  
Patent Examiner  
Art Unit 1655  
(571) 272-0923

September 28, 2006

  
TERRY MCKELVEY, PH.D.  
SUPERVISORY PATENT EXAMINER